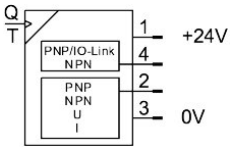
Flow sensor
SFAW-32T-TG12-E-PNLK-PNVBA-M12

Part number: 8036872



General operating condition

Data sheet

Feature	Value
Symbol	00995566
Approval	RCM c UL us - Listed (Oil)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Note on materials	RoHS compliant
Measured variable	Flow rate Temperature
Flow direction	Unidirectional P1 -› P2
Measurement method	Flow rate: Vortex Temperature: PT1000
Start value for flow rate measuring range	1.8 l/min
End value for flow rate measuring range	32 l/min
Temperature measurement start value	0 °C
Temperature measurement end value	90 °C
Operating pressure	0 MPa ... 1.2 MPa
Operating pressure	0 bar ... 12 bar
Operating pressure	0 psi ... 174 psi
Note on operating pressure	Max. 1.2 MPa (12 bar / 174 psi) at 40 °C Max. 0.6 MPa (6 bar / 87 psi) at 90 °C
Overload pressure	4 MPa
Overload pressure	40 bar
Overload pressure	580 psi
Operating medium	Liquid media Water Neutral fluids
Note on operating and pilot medium	Media with a kinematic viscosity = 1.8 mm²/sec. [cSt]. Compatibility of the media with the substances in contact with the media must be ensured.
Media temperature	0 °C ... 90 °C
Ambient temperature	0 °C ... 50 °C
Nominal temperature	23 °C
Accuracy of flow rate	±2 %FS for flow ≤ 50 %FS ±3% of measured value for flow rate ≥ 50% FS
Accuracy temperature in ± °C	2 °C
Repetition accuracy of flow rate	‹ ±0.5% FS for flow rate ‹= 50 %FS ‹ ±1% of measured value for flow rate ›= 50 %FS

Feature	Value
Temperature coefficient span in ± %FS/K	typ. ±0.05%FS/K
Switching output	2 x PNP or 2 x NPN, switchable
Switching function	Window comparator Threshold value comparator Freely programmable
Switching element function	NC or NO, switchable
Max. output current	100 mA
Analogue output	0 - 10 V 4 - 20 mA 1 - 5 V
Flow characteristic curve start value	0 l/min
Flow characteristic curve end value	32 l/min
Temperature characteristic curve start value	0 °C
Temperature characteristic curve end value	100 °C
Max. load resistance current output	500 Ohm
Min. load resistance voltage output	15 kOhm
Short circuit current rating	Yes
Overload protection	Available
Protocol	IO-Link®
IO-Link, Protocol version	Device V 1.1
IO-Link, Profile	Smart sensor profile
IO-Link, Function classes	Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel
IO-Link, communication mode	COM2 (38.4 kBaud)
IO-Link, SIO-Mode support	Yes
IO-Link, Port class	A
IO-Link, Process data length OUT	0 bytes
IO-Link, Process data length IN	5 bytes
IO-Link, Process data content IN	1 bit BDC (temperature monitoring) 1 bit BDC (volume monitoring) 14 bit PDV (measured flow value) 14 bit PDV (measured temperature value) 2 bit BDC (flow monitoring)
IO-Link, Service data IN	32-bit volume measurement
IO-Link, Min. cycle time	5 ms
IO-Link, Data storage required	500 Byte
Operational voltage range DC	18 V ... 30 V
Reverse polarity protection	For all electrical connections
Electrical connection 1, connection type	Plug
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	5
Electrical connection 1, type of mounting	Not rotatable
Electrical connection 1, compatible type of mounting	Compatible with rotatable screw-type lock
Electrical connection 1, connection pattern	00995383
Max. cable length	30 M
Mounting position	Any
Fluid connection	Female thread G1/2
Product weight	400 g
Material housing	Reinforced PA
Material in contact with the medium	PA6T/6I reinforced

Feature	Value
Displayable units	US gal US gal/min cft cft/min l l/h l/min m3 °C °F
Degree of protection	IP65
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L